extends perpendicular to reflector 506 and has a length ranging from 200 to 1500 microns and preferably approximately 1000 microns. A suspension beam 857 is secured to each end of central portion 856a and preferably extends perpendicular to the central portion 856a. The other end of each suspension beam 857 is secured to a mount 858 anchored to substrate 526. Each of the suspension beams has a length ranging from 50 to 500 microns and preferably approximately 200 microns and a width ranging from three to 10 microns and preferably approximately four microns. Translation shuttle 856 and suspension beams 857 are each formed from top wafer 668 and are suspended above substrate 526 by air gap 671.--

B3 end

IN THE CLAIMS

Amend the following claims to read:

1. (Twice Amended) A single mode tunable laser operable over a range of wavelengths comprising a laser source for providing light with a single wavelength selected from the range of wavelengths, a diffractive element spaced from the laser source for redirecting the light received from the laser source, a reflective element spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back to the diffractive element, the diffractive element receiving the light further redirected by the reflective element and returning the light to the laser source whereby the laser source, the diffractive element and the reflective element cause the light to lase at the wavelength, and at least one microactuator coupled to one of the diffractive element and the reflective element for causing angular movement of such element to permit selection of the single wavelength of the light from the range of wavelengths.

B4

2. (Amended) The tunable laser of Claim 1 wherein the light travels from the laser source to the diffractive element and then to the reflective element along an optical path length and wherein the wavelength has a half wavelength and can be selected from the range of wavelengths, the at least one microactuator moving said one of the diffractive element and the reflective element so that the optical path length equals an integer number of half wavelengths of the selected wavelength.

B5

5. (Amended) The tunable laser of Claim 1 wherein the at least one microactuator includes a microactuator coupled to the reflective element for causing angular movement of the reflective element.

B6

8. (Amended) The tunable laser of Claim 6 further comprising means for translating the reflective element relative to the diffractive element.

B7

13. (Twice Amended) A tunable laser comprising a laser source for providing light with a wavelength selected from a range of wavelengths, a diffractive element spaced from the laser source for redirecting the light received from the laser source, a reflective element spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back to the diffractive element, the diffractive element receiving the light further redirected by the reflective element and returning the light to the laser source whereby the laser source, the diffractive element and the reflective element cause the light to lase at the wavelength, at least one microactuator coupled to one of the diffractive element and the reflective element for moving such element to select the wavelength of the light and a counterbalance coupled to the at least one microactuator and the one of the diffractive element and the reflective element for inhibiting undesirable movement of the one of the diffractive element and the reflective element in response to externally applied accelerations to the tunable laser.

B8

28. (Twice Amended) A tunable laser comprising a laser source for providing light with a wavelength selected from a range of wavelengths, a diffractive element spaced from the laser source for redirecting the light received from the laser source, a reflective element spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back to the diffractive element, the diffractive element receiving the light further redirected by the reflective element and returning the light to the laser source whereby the laser source, the diffractive element and the reflective element cause the light to lase at the wavelength, and a rotatable micromechanical actuator coupled to one of the diffractive element and the reflective element for rotating such element to select the wavelength of the light.

B9

30. (Twice Amended) The tunable laser of Claim 29 further comprising an additional microactuator coupled to such element for translating such element.

B10

37. (Amended) A tunable laser comprising a laser source for providing light with a wavelength selected from a range of wavelengths, a diffractive element spaced from the laser